

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1061776

Luminaire Tested: S125RDR-S850D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

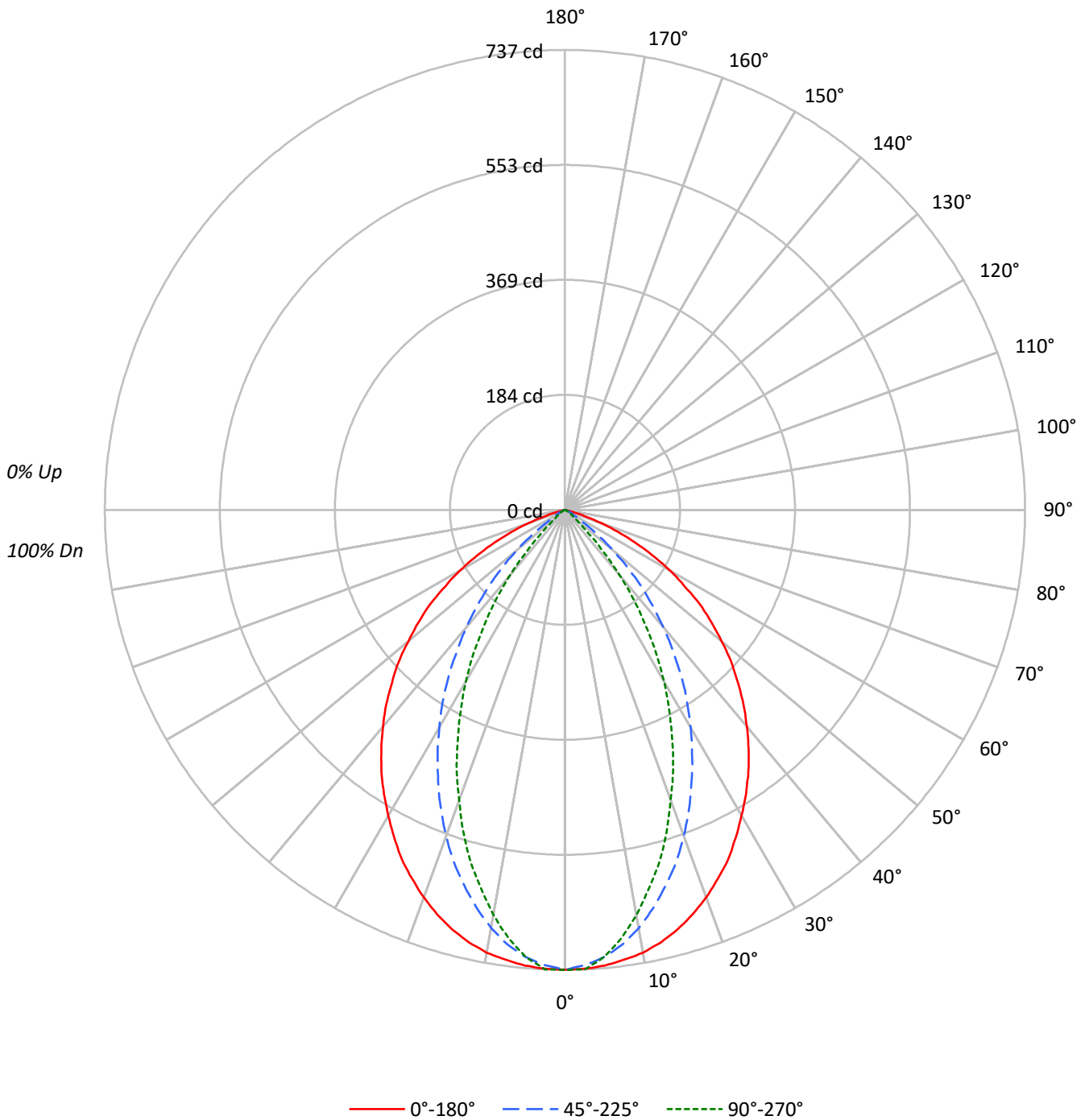
Lumens per Lamp: N/A
Luminaire Lumens: 952.2 lumens
Efficiency: N/A
Efficacy: 36.9 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	52	47	44	42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5074	5074	5074
5°	5067	4973	4973
10°	5037	4758	4609
15°	4963	4443	4166
20°	4845	4075	3626
25°	4698	3649	3087
30°	4499	3200	2520
35°	4307	2730	1888
40°	4072	2202	1223
45°	3816	1666	531
50°	3510	1063	198
55°	3163	467	140
60°	2678	201	94
65°	2028	127	47
70°	1234	58	20
75°	258	27	27
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3816 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.9	7.1
10°-20°	177.1	18.6
20°-30°	227.4	23.9
30°-40°	214.1	22.5
40°-50°	149.7	15.7
50°-60°	80.0	8.4
60°-70°	31.9	3.3
70°-80°	4.1	0.4
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	472.5	49.6
0°-40°	686.5	72.1
0°-60°	916.1	96.2
0°-90°	952.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	952.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	733	731	720	722	720	70
15°	696	674	623	594	584	196
25°	618	564	480	428	406	284
35°	512	431	325	251	225	320
45°	392	294	171	83	54	302
55°	264	161	39	14	12	234
65°	124	50	8	4	3	124
75°	10	3	1	1	1	19
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	737.0	737.0	737.0	737.0	737.0
2.5°	736.1	737.0	730.2	736.1	737.0
5°	733.1	731.2	719.5	721.5	719.5
7.5°	727.3	722.4	703.0	696.2	692.3
10°	720.5	709.8	680.6	666.1	659.2
12.5°	709.8	694.3	653.4	631.0	621.3
15°	696.2	673.8	623.3	594.1	584.4
17.5°	679.7	650.5	592.2	556.2	541.6
20°	661.2	622.3	556.2	513.4	494.9
22.5°	639.8	595.1	519.2	471.6	453.1
25°	618.4	564.0	480.3	427.8	406.4
27.5°	592.2	531.9	441.4	385.0	361.7
30°	565.9	499.8	402.5	341.3	317.0
32.5°	539.6	465.8	363.7	295.6	271.3
35°	512.4	430.7	324.8	250.9	224.6
37.5°	483.3	395.7	283.0	208.1	180.9
40°	453.1	361.7	245.0	166.3	136.1
42.5°	423.9	327.7	207.1	125.4	92.4
45°	391.9	293.6	171.1	82.6	54.5
47.5°	361.7	260.6	134.2	47.6	28.2
50°	327.7	226.6	99.2	25.3	18.5
52.5°	295.6	193.5	66.1	16.5	14.6
55°	263.5	161.4	38.9	13.6	11.7
57.5°	226.6	130.3	21.4	10.7	8.8
60°	194.5	102.1	14.6	7.8	6.8
62.5°	157.5	74.9	10.7	5.8	4.9
65°	124.5	49.6	7.8	3.9	2.9
67.5°	92.4	29.2	4.9	1.9	1.9
70°	61.3	15.6	2.9	1.0	1.0
72.5°	32.1	6.8	1.9	1.0	1.0
75°	9.7	2.9	1.0	1.0	1.0
77.5°	0.0	1.0	0.0	0.0	1.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)